

KENWOOD

STEREO CASSETTE TAPE DECK

KX-9050

KX-9050S

INSTRUCTION MANUAL

KENWOOD CORPORATION

Introduction

Your choice of this product indicates that you are a devotee to excellence in sound reproduction.

We appreciate your patronage and take pride in the long tradition of quality components that our company represents. So that you can get the most out of your unit, we suggest that you take the time to read through this manual before you hook up and operate your system. This will acquaint you with operating features and system-connection considerations so that your listening pleasure will be enhanced right from the start. You will notice that in all aspects of planning, engineering, styling, operating convenience and adaptability we have sought to anticipate your needs and desires.

Keep this manual handy for future reference.

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model _____ Serial Number _____

Unpacking


Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost.

Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.

We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

WARNING NOTICE:

IN MOST CASES IT IS AN INFRINGEMENT OF COPYRIGHT TO MAKE COPIES OF TAPES OR DISCS WITHOUT THE PERMISSION OF THE COPYRIGHT OWNERS. ANYONE WISHING TO COPY COMMERCIALY AVAILABLE TAPES OR DISCS SHOULD CONTACT THE MECHANICAL COPYRIGHT PROTECTION SOCIETY LIMITED OR THE PERFORMING RIGHTS SOCIETY LIMITED.

Dolby noise reduction and HX Pro headroom extension manufactured under license from Dolby Laboratories Licensing Corporation. HX Pro originated by Bang & Olufsen. "DOLBY", the double-D symbol  and "HX PRO" are trademarks of Dolby Laboratories Licensing Corporation.

Accessories

Audio cord 2 System control cord 1



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⚠ Caution: Read this page carefully to ensure safe operation.

Before applying power

For the U.S.A. and Canada

Important!

Units shipped to the U.S.A. and Canada are designed for operation on 120 volts AC only.

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THE AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

For Australia and Europe

Important!

Units shipped to Australia are designed for operation on 240 V AC only.

Units shipped to Europe are designed for operation on 230 V AC only.

For the United Kingdom

Important!

Units shipped to the U.K. are designed for operation on 240 volts AC only.

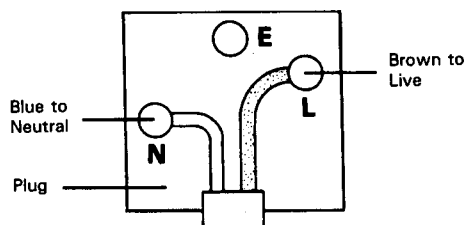
The mains plug must be removed from the wall socket prior to any internal examination.

The wires in this mains lead are coloured in accordance with the following code:

Blue Neutral
Brown Live

The wires in this mains lead must be connected to the terminals in the plug as follows:

Wire colour	Plug terminal marking
Blue	N or Black
Brown	L or Red



Notes:

1. If a 13-amp plug is used, this must be fitted with a 5-amp fuse.
2. If a 3-pin plug with earthing contact is used, no wire must be connected to the E terminal.

For other countries

Important!

Units shipped to countries other than the above countries are equipped with an AC voltage selector switch on the rear panel. Refer to the following paragraph for the proper setting of this switch.

AC voltage selection

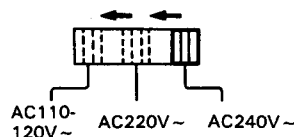
This unit operates on 110-120 or 220-240 volts AC. The AC voltage selector switch Type A or Type B on the rear panel is set to the voltage that prevails in the area to which the unit is shipped. Before connecting the power cord to your AC outlet, make sure that the setting position of this switch matches your line voltage. If not, it must be set to your voltage in accordance with the following direction.

Note:

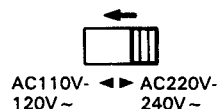
Our warranty does not cover damage caused by excessive line voltage due to improper setting of the AC voltage selector switch.

AC voltage selector switch

Type A







Type B



Move switch lever to match your line voltage with a small screwdriver or other pointed tool.

Safety precautions

WARNING: TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

 <div data-bbox="308 1653 555 1738">CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN</div> 	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE, REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
	THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.
	THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

IMPORTANT SAFEGUARDS

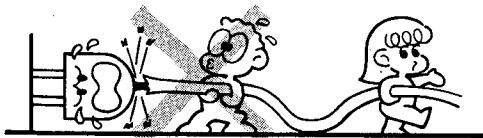
⚠ Caution : Read this page carefully to ensure safe operation.

Please read all of the safety and operating instructions before operating this unit. For best results, follow all warnings placed on the unit and adhere to the operating and use instructions. These safety and operating instructions should be retained for future reference.

1. Power sources — The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

2. Power-cord protection — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

Never pull or stretch the cord.

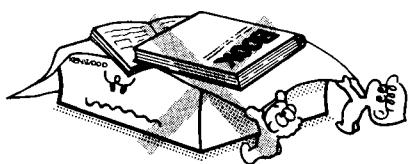


3. Grounding or polarization — The precautions should be taken so that the grounding or polarization means of this unit is not defeated.

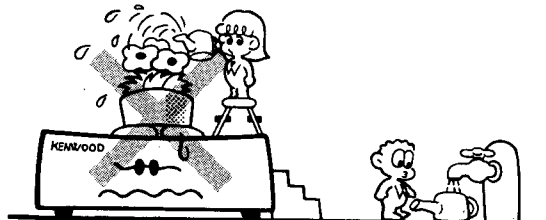
4. Ventilation — The unit should be situated so that its location or position does not interfere with its proper ventilation.

To maintain good ventilation, do not put records or a table-cloth on the unit. Place the unit at least 10 cm away from the walls.

Do not use the unit on a bed, sofa, rug or similar surface that may block the ventilation openings.

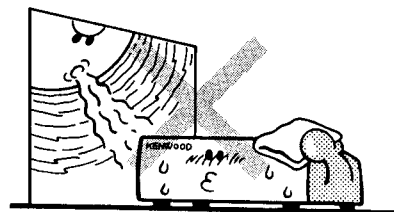


5. Water and moisture — The unit should not be used near water — for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

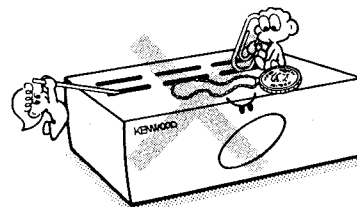


6. Temperature — The unit may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above +5°C (41°F).

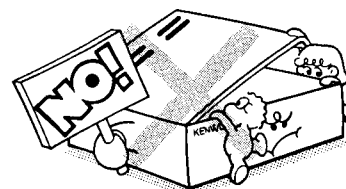
7. Heat — The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units (including amplifiers) that produce heat.



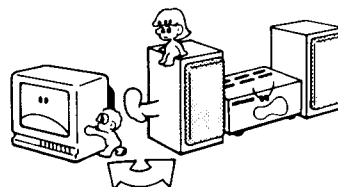
8. Electric shock — Care should be taken so that objects do not fall and liquid is not spilled into the enclosure through openings. If a metal object, such as a hair pin or a needle, comes into contact with the inside of this unit, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.



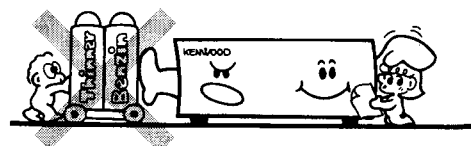
9. Enclosure removal — Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.



10. Magnetic fields — Keep the unit away from sources of magnetic fields such as TV sets, speaker systems, radios, motorized toys or magnetized objects.



11. Cleaning — Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzine, etc. to clean the cabinet. Use a clean dry cloth.



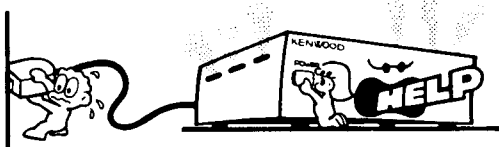
- 12. Carts and stands** — An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



- 13. Nonuse periods** — The power cord of the unit should be unplugged from the outlet when left unused for a long period of time.

- 14. Abnormal smell** — If an abnormal smell or smoke is detected, immediately turn the power OFF and pull out the power cord. Contact your dealer or nearest service center.

POWER OFF!



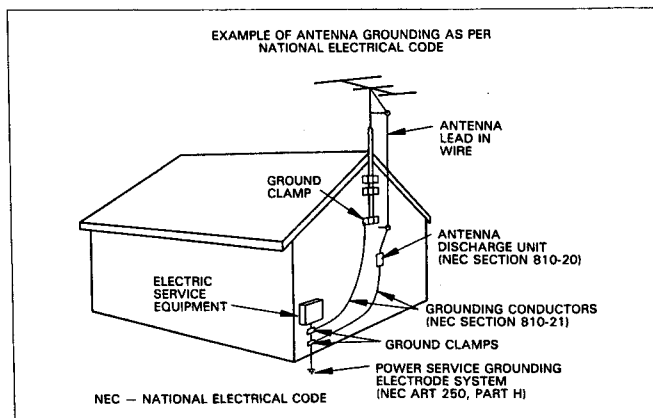
- 15. Damage requiring service** — The unit should be serviced by qualified service personnel when:

- A.** The power-supply cord or the plug has been damaged; or
- B.** Objects have fallen, or liquid has been spilled into the unit; or
- C.** The unit has been exposed to rain; or
- D.** The unit does not appear to operate normally or exhibits a marked change in performance; or
- E.** The unit has been dropped, or the enclosure damaged.

- 16. Servicing** — The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

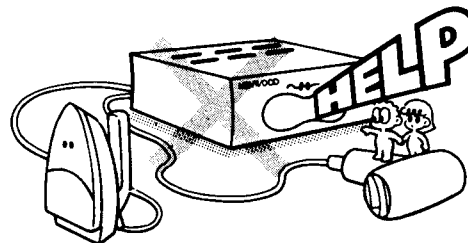
- 17. Outdoor antenna grounding** — If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/NFPA 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding con-

ductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.



- 18. Power lines** — An outdoor antenna should be located away from power lines.

- 19. AC outlets** — Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical units, such as an iron or toaster, to it to prevent fire or electric shock.



Notes:

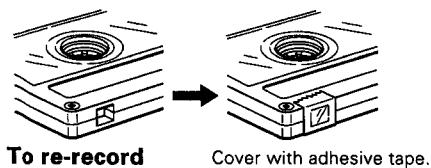
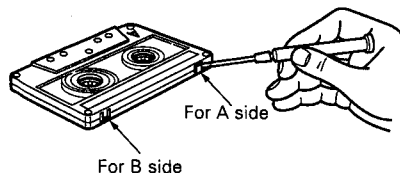
- 1.** Item 3 is not required except for grounded or polarized equipment.
- 2.** Item 17 and 18 are not required except for units provided with antenna terminals.
- 3.** Item 17 complies with UL in the U.S.A.

Before operation

Notes on cassette tape

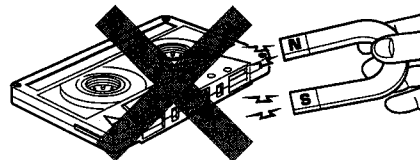
Safety tab (accidental erasure prevention tab)

After an important recording has been finished, break the safety tab, to prevent the recorded contents from being erased or re-recorded on accidentally.



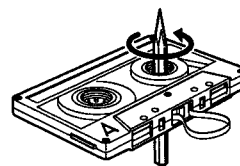
To store cassette tapes

Do not store the tapes in a place which is subject to direct sunlight, or near equipment that generates heat. Keep the cassette tapes away from any magnetic field.



When there is slack in the tape

In such a case, insert a pencil into the reel hole and wind the reel hub to remove the slack.



Notes:

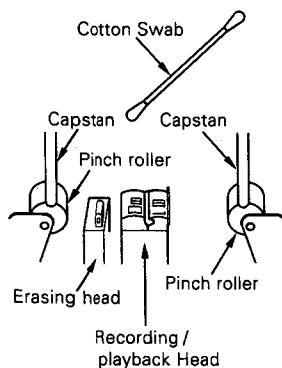
1. 120-minute cassette tape

Since a 120-minute cassette tape is very thin, the tape could adhere to the pinch roller or be easily cut. It is recommended that these tapes not be used with this unit to prevent possible damage.

2. Endless tapes

Do not use an endless tape, as this could damage the mechanism of the unit.

Cleaning the head section



Cleaning the heads and peripheral components

For maintaining the best condition of the deck and for longer service life, always keep the heads (recording / playback / erase), capstan and pinch roller clean. To clean them, perform the following:

1. Press the OPEN / CLOSE key to open the cassette holder.
2. Using a cotton swab dipped in alcohol, clean the head (recording / playback / erase), capstan and pinch roller carefully.

Demagnetizing the head

When the recording / playback head is magnetized, the sound quality will be deteriorated. In such a case, demagnetize the head using a commercially available demagnetizer (head eraser).

Note:

There are precisely aligned parts around the heads, including the tape guides. When cleaning, pay special attention so as not to apply shock to them.

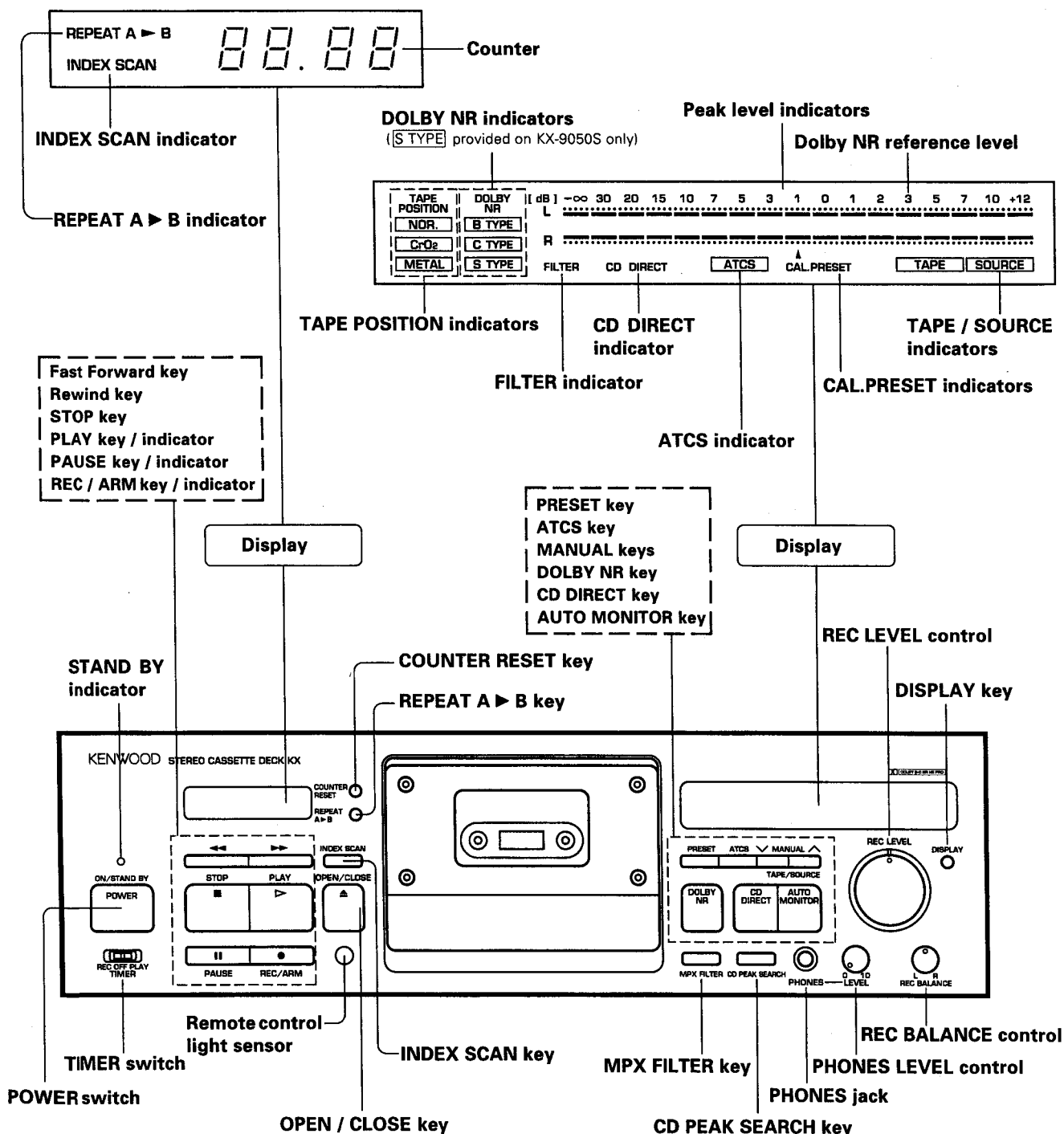
Beware of condensation

When water vapor comes into contact with the surface of cold material, water drops are produced. If condensation occurs, correct operation may not be possible, or the unit may not function correctly. This is not a malfunction, however, and the unit should be dried. (To do this, turn the POWER switch ON and leave the unit as it is for several hours.)

Be especially careful in the following conditions:

- When the unit is brought from a cold place to a warm place, and there is a large temperature difference.
- When a heater starts operating.
- When the unit is brought from an air-conditioned place to a place of high temperature with high humidity.
- When there is a large difference between the internal temperature of the unit and the ambient temperature, or in conditions where condensation occurs easily.

Control and indicators



STAND BY mode of POWER switch

When the power cord of this system is plugged into an AC outlet, the STAND BY indicator lights up regardless of the ON/OFF setting of the POWER switch. This indicates that a small amount of current is being supplied to the unit to back up the memory contents. This mode is referred to as the Stand By mode. While the STAND BY indicator is lit, the power of the system can be switched ON / OFF from the remote control unit.

DISPLAY key

Every time the [DISPLAY] key is pressed, the displays change as follows:

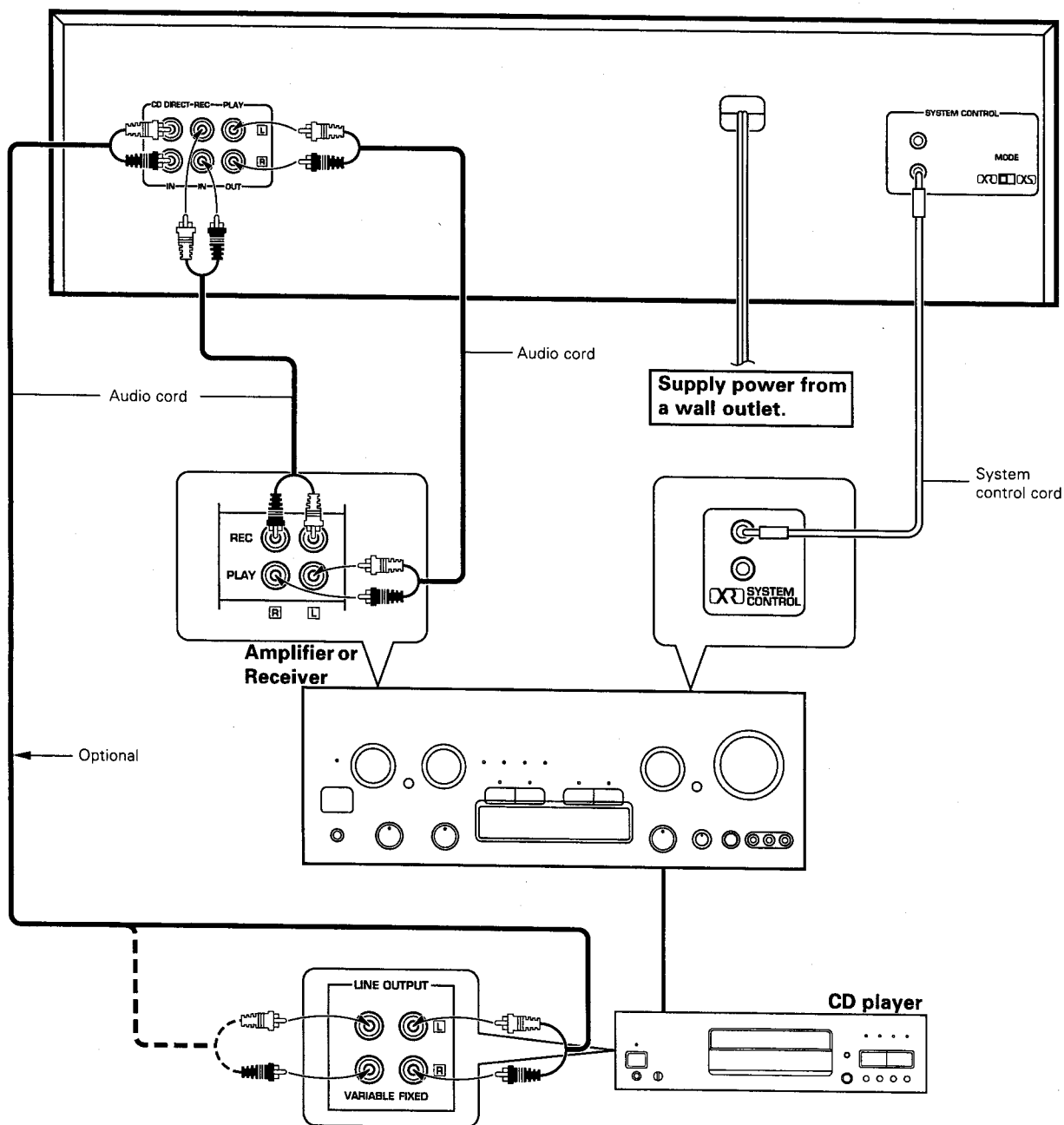
Normal lighting → Counter lighting → All OFF



System connection

Make connection as shown below.

When connecting the related system components, refer also to the instruction manuals of the related components.
Do not plug in the power lead until all connections are completed.

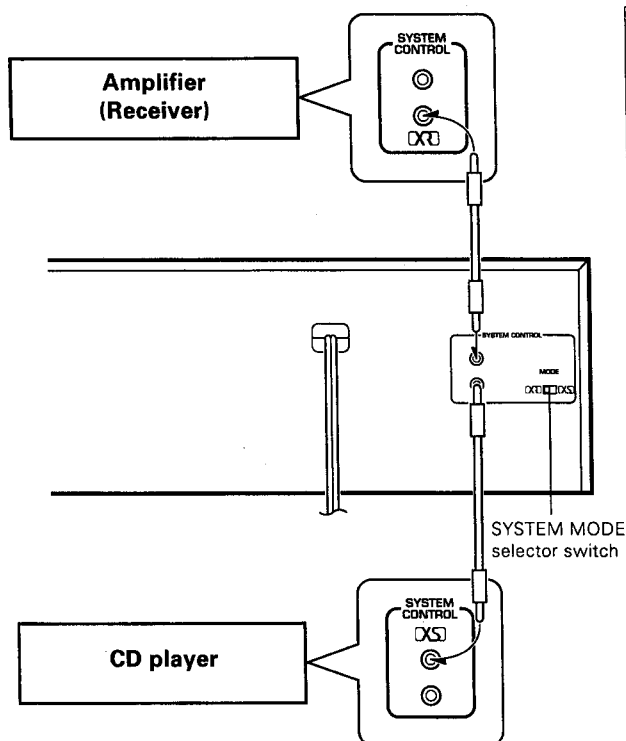


In case of CD DIRECT recording:

Normally, connect the CD DIRECT jacks to the FIXED OUT jacks of the CD player.
The levels of the VARIABLE OUT jacks are sometimes controlled with the headphones level control. If the CD DIRECT jacks are connected to the VARIABLE OUT jacks, check the headphones level control.
Refer to the instruction manual of the CD player.

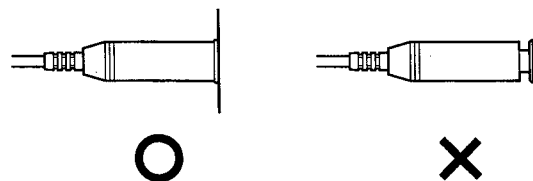
Notes:

1. Connect all cords firmly. If connections are loose, there could be loss of sound or noise produced.
2. When plugging and unplugging connection cords, be sure to first remove the power cord from the AC outlet. Plugging / unplugging connection cords without removal of the power cord can cause malfunctions or damage to the unit.



Note on SYSTEM CONTROL jack

Various system operations are available by connecting this jack to a KENWOOD amplifier or CD player equipped with a SYSTEM CONTROL jack. Do not connect this jack to other equipment than specified by us, otherwise malfunction may result.



- Insert the plug of each system control cord securely until the root.

SYSTEM MODE selector switch

When this unit is connected to the SYSTEM CONTROL jack of a KENWOOD amplifier (receiver) via a system control cord, set this switch according to the functionality or operating procedure of the amplifier (receiver).

"XS" position

Set the switch to this position when the audio cords are connected to the TAPE 1 or TAPE B jacks of an amplifier (receiver) with the XS mark.

"XR" position

Set this switch to the XR position in the following cases.

- ① When this unit is connected to an amplifier (receiver) with the XR mark.
- ② When this unit is connected to an amplifier (receiver) with the XS mark and the audio cords are connected to other jacks than TAPE 1 and TAPE B.

- If the switch is set to XS position while the audio cords are connected to the TAPE 2 (MONITOR) jacks of an amplifier (receiver) equipped with the monitor function, monitoring during recording will not be available.
- Before changing the system mode, be sure unplug the power cord from the power out let.

System operations

Connection with an amplifier

The SYSTEM CONTROL jacks of KENWOOD amplifiers are marked either XR or XS.

The following operations are respectively available by connecting this unit to an amplifier via a system control cord.

- XR type jack:** Systematic remote control using the remote control unit provided with the amplifier is available.
- XS type jack:** Both systematic remote control and "Easy Operation" are available.

- If this cassette deck is connected to an amplifier (or a receiver) via a system control cord, the power of the cassette deck can be switched ON / OFF in interlocking with the power ON / OFF of the amplifier (receiver).

For details, please read the instruction manual supplied with the amplifier (receiver).

Connection with a CD player

The "CD PEAK SEARCH recording" is available when this unit is connected to a CD player with the XS mark via a system control cord.

For details, please refer to page 18.

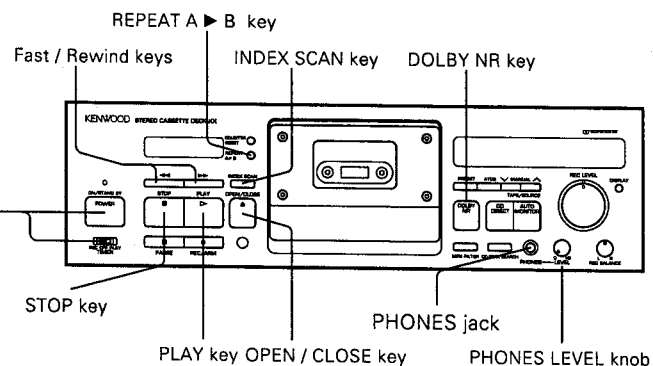
Listening to cassette tapes

Before starting playback.

- ① Set the **TIMER** switch to **OFF**.



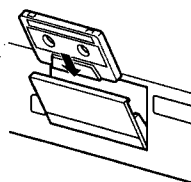
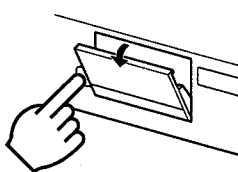
- ② Set the **POWER** switch to **ON**.



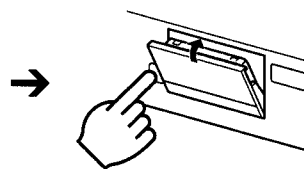
■ To playback a tape

1 Insert a cassette tape.

Press the **OPEN / CLOSE** Key.



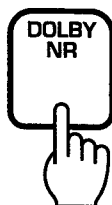
Press the **OPEN / CLOSE** Key.



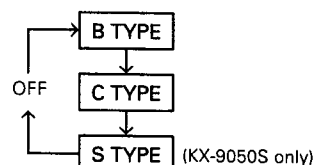
- The **OPEN / CLOSE** key is also valid when the power is in the **STAND BY** mode.
- The type of tape, Normal, Chrome or Metal, is detected and set automatically.
- Be sure to remove tape slack before insertion.

2 Determine the playback conditions.

Select the **Dolby NR** mode.

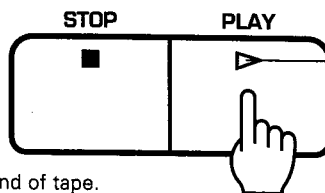


Select according to the tape to be played.



The indication changes every time the key is pressed.

3 Start playback.



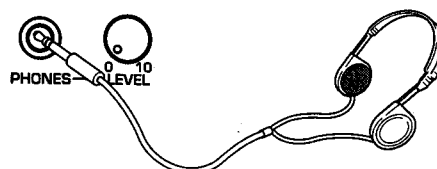
Lights in green.

- Playback stops automatically at the end of tape.

To stop playback, press the key.

Listening through headphones

Insert the plug of the commercially available headphones into the **PHONES** jack and adjust the sound level with the **PHONES LEVEL** control.

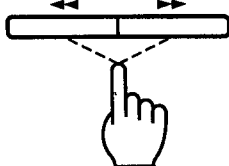


■ Fast Forward and Rewind

1 Stop playback.



2 Press the ◀◀ key or ▶▶ key.



◀◀: Rewound in the
↓ direction ▶▶: Fast forwarded
in the ↓ direction

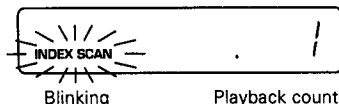
To stop the Fast Forward or Rewind operation



■ Index scan operation

Index scan plays the first about 10 seconds of every tune on tape.

INDEX SCAN



To cancel Index scan



- Normal playback starts.



- Playback stops.

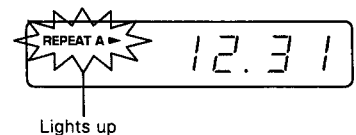
■ A / B repeat

A / B repeat plays the block between two designated points repeatedly.

1 Start playback.

2 Register start point A.

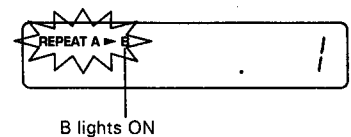
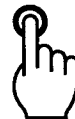
REPEAT
A ▶ B



Leave an interval of more than 10 seconds.

3 Register end point B.

REPEAT
A ▶ B



- A / B repeat starts automatically.
- After repeating playback 16 times, normal playback resumes.
- The counter shows the total number of repetition.

To cancel A-B repeat mode.

To resume normal playback mode

REPEAT
A ▶ B



- Pressing the [PLAY] key starts repeated playback of the single tune being played.

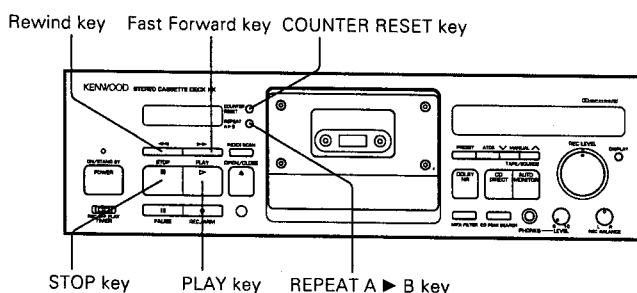
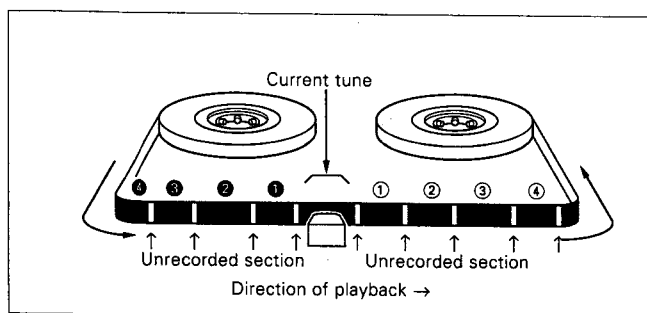
To stop playback



DPSS operation

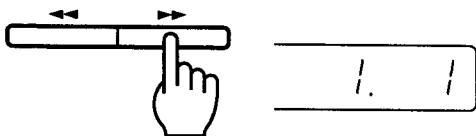
The DPSS (Direct Program Search System) enables the following convenient operations according to the instructions of the operation keys. The DPSS functions are based on the detection of non-recorded spaces of 4 seconds or more between tunes.

1. **Skip play:** By specifying a tune located several tunes beyond (or behind) the tune being played, skips tunes between the current tune and the selected tune and starts playback from the beginning of the selected tune. Up to 16 tunes can be skipped in Skip Search.
2. **Single-tune repeated playback:** One single tune is played back repeatedly up to 16 times.
3. **Rewind & Play:** Rewinds the tape to the beginning and starts playback from there.
4. **Dash & Play:** If a non-recorded space of more than 10 seconds is detected during playback, that space will be skipped by fast forward tape winding.



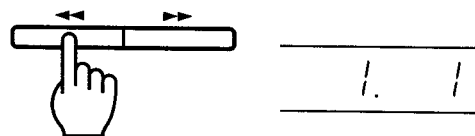
■ Skip play operation

To play a tune located immediately after the tune being played



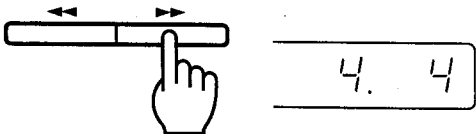
Press once during the playback.

To play the tune being played from the beginning



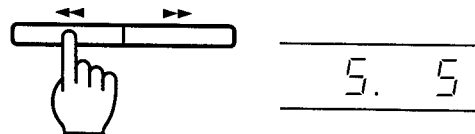
Press once during the playback.

To play a tune located 4 tunes beyond



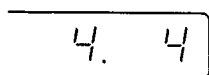
Press 4 times during the playback.

To play the tune located 4 tunes behind



Press 5 times during the playback.

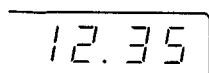
Example of display during skip play



When a tune located 4 tunes beyond is selected



The right figure decrements.



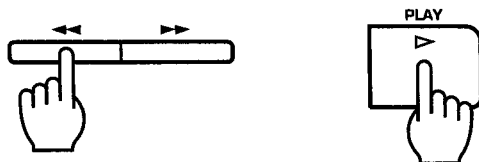
When the tune is searched, the normal counter display resumes.

The DPSS will not function properly with the following types of tapes.

- Tapes containing spaces of 4 seconds or more, such as conversations and speeches.
- Tapes containing extremely low levels or non-recorded spaces in the middle of tunes, such as classical music.
- Tapes containing recording of large noise between tunes.
- Tapes containing spaces of less than 4 seconds between tunes.
- Tapes recorded with low recording level.
- Tapes recorded using Cross-fade recording.

■ Rewind & Play operation

This operation is not available from the remote control unit.



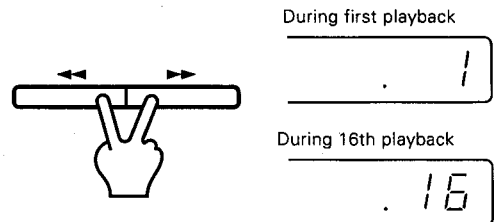
Press simultaneously.

■ Dash & Play operation

The Dash & Play skips long non-recorded spaces automatically as the tape is played.

This operation is not available from the remote control unit.

Press the and keys simultaneously.



- The unit enters the stop mode after repeating Dash & Play 16 times.

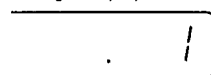
■ Single-tune repeated playback operation

1 Play the tune to be repeated.

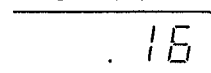
2 Press the play key.



During first playback



During 16th playback



- Normal playback resumes after repeating the same tune for 16 times.

■ To cancel the playback above in the middle

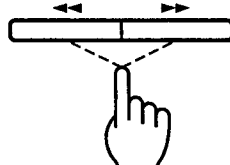
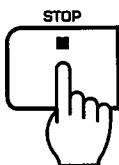


- Playback is stopped.

■ Zero-stop operation

This operation is not available from the remote control unit.

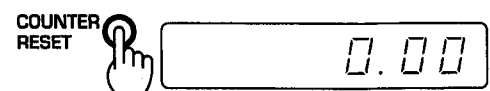
Press simultaneously.



- Tape is wound until counter reading near "0.00" where it stops.

Usage of counter

Before starting recording (playback), press the **COUNTER RESET** key to reset the counter to "0.00", and write down the counter reading when the recording (playback) should be stopped in the middle of the tape, etc.; this will make it easy to locate the same position when you want to continue recording (playback) next time. It is also possible to use the Zero-stop function the return to the position where recording (playback) was started.



How to record

The cassette deck incorporates the Dolby HX Pro headroom extension function and ATCS function to provide a recording with superior high-frequency characteristics.

Dolby S NR

(KX-9050S only) : The Dolby S type NR is a noise reduction system for high-quality sound reproduction. It is a consumer system developed based on the principle of the Dolby SR used in professional audio.

ATCS

: The ATCS stands for Automatic Tape Calibration System. This function optimizes the bias and recording sensitivity values automatically in order to make the full use of the characteristics of the tape to be used in recording.

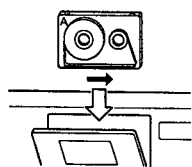
Preset function

: The optimum values for recording, set by the ATCS, can be stored for each type of tape (Normal, CrO₂ and Metal). The stored optimum values can be recalled simply by pressing the PRESET key.

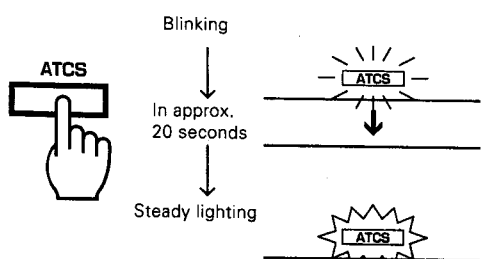
■ Optimum value preset operation

Preparation: Be sure to set the deck in the stop mode before entering the ATCS mode.

1 Insert a tape.



2 Press the ATCS key.

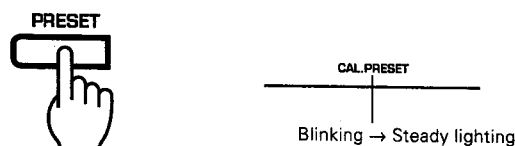


- The tape stops at a position a few seconds beyond the position where the key is pressed.

The set bias value can be changed as desired.

- When you have changed the bias value, set the deck in the stop mode again.

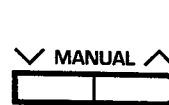
3 Store the values in preset memory.



- If bias and recording sensitivity values have already been preset, they are replaced by the new values.

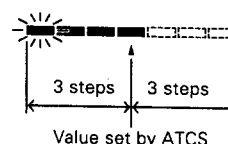
■ To change the bias value

The bias value set by the ATCS can be varied as desired



Press while [ATCS] indicator is lighting.

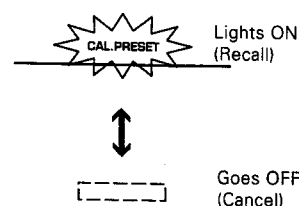
Peak level meter



The segment blinks when the variation limit is exceeded.

- The variation range is ± 3 steps from the center value (± 3 - step variation is not possible with some bias values).
- Adjust while monitoring the sound being recorded.

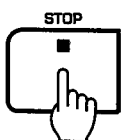
■ To cancel or recall the preset values



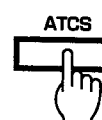
- Each press the key turns the indicator ON and OFF alternately.
- When the indicator is OFF, the bias value and recording sensitivity value returns to the initial values.

How to cancel ATCS operation

During adjustment
([ATCS] indicator blinking)



After adjustment
([ATCS] indicator in steady lighting)

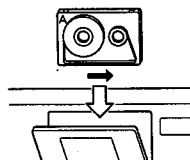


- The ATCS is not canceled even when the [OPEN / CLOSE] key is pressed.

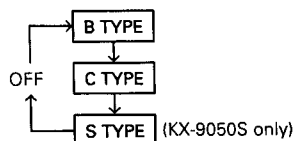
■ Ordinary recording

1 Set up the cassette deck.

- ① Insert a tape.



- ② Select the Dolby NR mode.



- ③ To record FM broadcast.



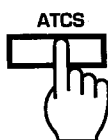
- To cancel, press the **MPX FILTER** key again.

2 Select the source to be recorded.

3 Set the optimum values for recording (ATCS mode).

Recording is possible even when this step is omitted.

New setting



- The optimum values are set in about 20 seconds.
- For the preset operation, refer to page 14.

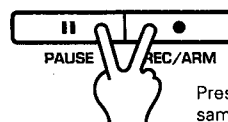
Recalling



4 Set the recording level.

- ① Play a music source.

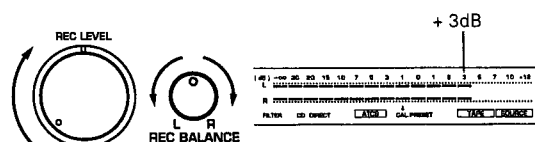
- ② Enter the record-pause mode.



Press both keys at the same time.

- If the cassette tape is protected from recording, the cassette holder will open.

- ③ Adjust the recording level and recording balance.



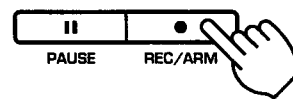
- Adjust so that segments around the + 3 dB segment of the peak level meter light up at times.

- ④ Stop playing the source.

5 Start recording.

- ① Play the music source from the beginning.

- ② Press the **REC/ARM** key.



Press once.

- The deck enters the stop mode automatically when the tape has been recorded till the end.

Dolby noise reduction system

The Dolby noise reduction system was developed to reduce the tape hiss noise generated during playback.

The optimum effect of the Dolby NR system is obtained when the same type NR system is used for both recording and playback. If a different type NR system is used, playback is not performed correctly. Make sure that the same type noise reduction system is used for both recording and playback.

It is recommended that tapes recorded with Dolby NR be marked "B", "C" or "S" so that the Dolby NR system used in recording can easily be distinguished.

Dolby B NR

The most popular noise reduction system used in home audio components. Usually, Dolby NR system corresponds to B NR.

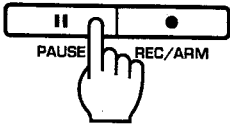
Dolby C NR


Dolby C NR offers improved noise reduction performance over that of the Dolby B NR.

Dolby S NR (KX-9050S only)

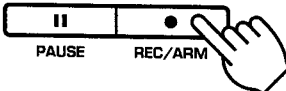
This is the latest Dolby NR system featuring improvement in noise in the high and low frequencies. As, in human audition, it is compatible with Dolby B NR or NR OFF, tapes recorded with Dolby S NR can be played on ordinary car stereo and headphone stereo with Dolby B NR or NR OFF.

■ To pause recording temporarily



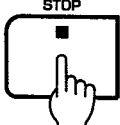
- The  indicator lights up.

To resume recording



■ To stop recording

1

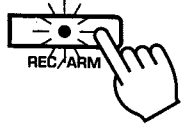



- Do not press the **OPEN / CLOSE** key until the tape has stopped completely.

2 Stop playing the source component.

■ How to provide non-recorded blanks between programs

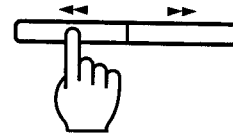
It makes a non-recorded blank of about 4 seconds.

In stop mode	During recording
<p>Press successively twice.</p> 	<p>Press once.</p> 
<ul style="list-style-type: none"> • After leaving a non-recorded blank of about 4 seconds, the deck enters the record-pause mode. 	

■ To re-start recording after mistake

The following procedure is useful when you want to cancel recording in progress and restart it. A non-recorded space of about 4 seconds or more should be reserved before the position where recording was started.

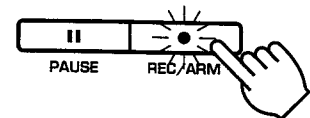
1 Stop recording and rewind tape.



- The recording is aborted, the tape is rewound to the beginning of the tune being recorded, and the deck enters the record-pause mode after leaving a non-recorded space of about 2 seconds from the end of the previous tune.

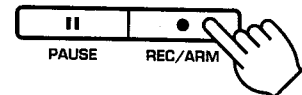
2 Re-start recording.

- ① Press the  key twice.



- A non-recorded space of about 4 seconds is reserved on tape, then the tape transport stops.

- ② Press the  key once.



- Recording starts.

AUTO MONITOR

Every time the **AUTO MONITOR** key is pressed, the monitored sound is switched alternately between TAPE and SOURCE.

When SOURCE is lighted:

The sound before being recorded (music from the tuner, CD player, DAT recorder, etc., selected by the amplifier's input selector) can be monitored through the speakers or headphones.

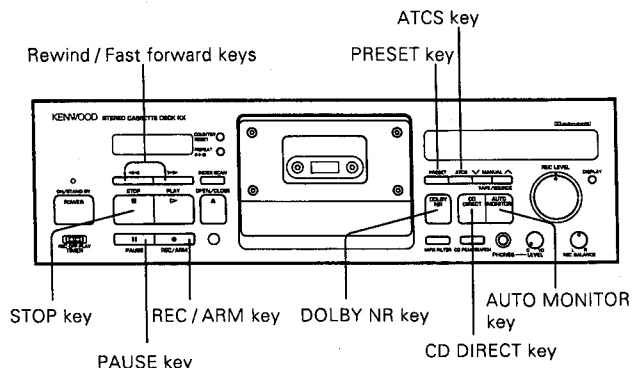
When TAPE is lighted:

The sound played back from the tape can be monitored. If it is during tape recording, this allows to check the tape recording condition.

- Whenever recording or playback is started, the SOURCE indicator being lit goes off and the TAPE indicator lights up.

Before CD DIRECT recording:

Connect the CD player to the CD DIRECT jacks according to "System connection" of page 8.



■ CD Direct recording

The source input through the CD DIRECT input jacks can be recorded with high quality by bypassing the REC LEVEL and REC BALANCE adjustment circuits.

1 Place a CD in the CD player.

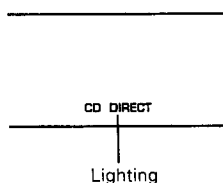
- If the CD player uses the disc changer, specify the disc to be played.

2 Select the CD DIRECT input.



Each press of the key alternates the line input and CD DIRECT input.

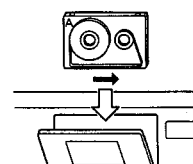
Display



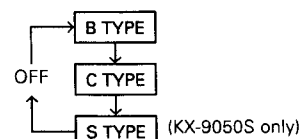
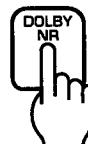
- The CD peak-search function cannot be used while the CD DIRECT input is selected.
- The MPX filter is turned OFF automatically.

3 Make preparations for recording.

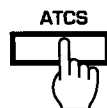
① Insert a tape.



② Select the Dolby NR mode.

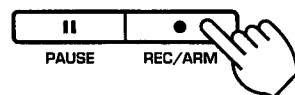


③ Activate the ATCS mode.



or

4 Start recording



- The REC LEVEL and REC BALANCE controls are invalid in the CD DIRECT mode.

After recording, turn the CD DIRECT recording OFF.

- So that the CD DIRECT indicator goes OFF.

Recording with Dolby HX Pro

When recording is started with this unit, the Dolby HX Pro headroom extension function automatically operates to provide a recording with superior high-frequency characteristics.

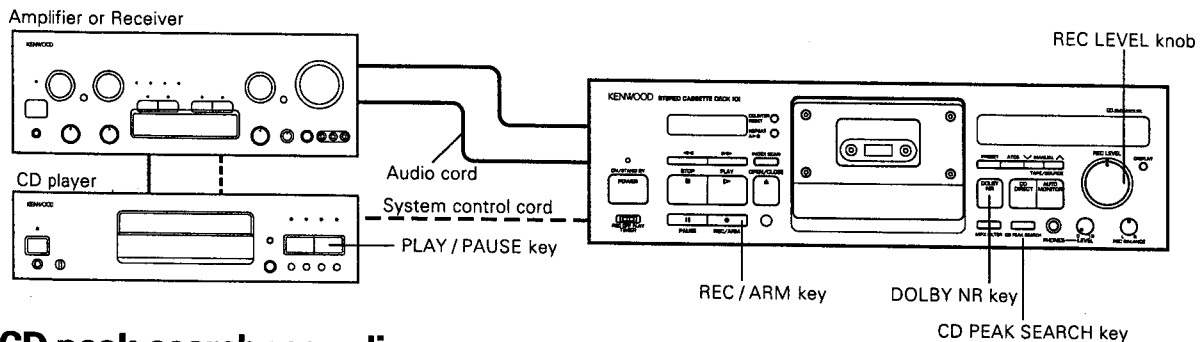
What is Dolby HX Pro

In ordinary recording using high-frequency biasing, the high-frequency bias current, which should be constant, is increased with some recording sources due to the high-frequency component contained in the music, etc. This increase affects the recording characteristics with distorted high frequencies and degraded dynamic range and frequency response.

The Dolby HX Pro circuit detects the high-frequency component contained in the music source being recorded, and reduces excessive bias current to make it constant. As a result, the recording characteristics of high frequencies are drastically improved, and the improved high-frequency reproduction can also be enjoyed even when the tape is played on tape decks which are not equipped with circuit.

How to record

Connect this unit to a KENWOOD "XS" type CD player as shown below.



■ CD peak-search recording

With this function, the CD player detects the peak level recorded onto the disc and plays the section containing the peak point so that you can set the recording level according to it.

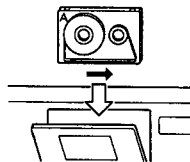
1 Set the input selector switches of the amplifier for the CD source.

2 Place a CD in the CD player.

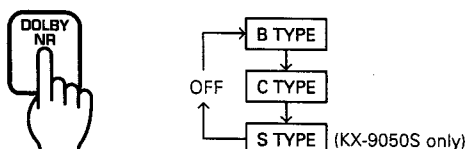
- If the CD player uses the disc changer, specify the disc to be played.

3 Make preparations for recording.

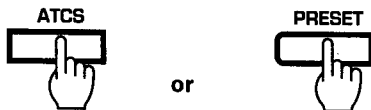
① Insert a tape.



② Select the Dolby NR mode.



③ Activate the ATCS mode.



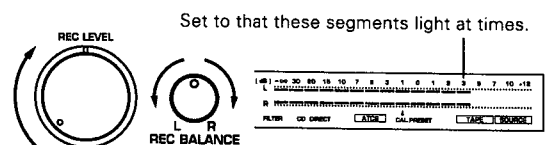
4 Search the peak value on the CD.

- Check if the CD DIRECT mode is OFF.
 - The CD DIRECT indicator should be OFF.
- Press the CD PEAK SEARCH key.

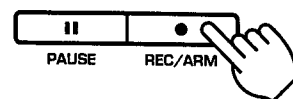


- The cassette deck enters the record-pause mode.
- Sound sampled from the CD is played back.
- If the CD player is not connected to this unit via a synchro cord, the CD peak search function will be canceled in about 30 seconds.

5 Adjust the recording level and recording balance.



6 Start recording.



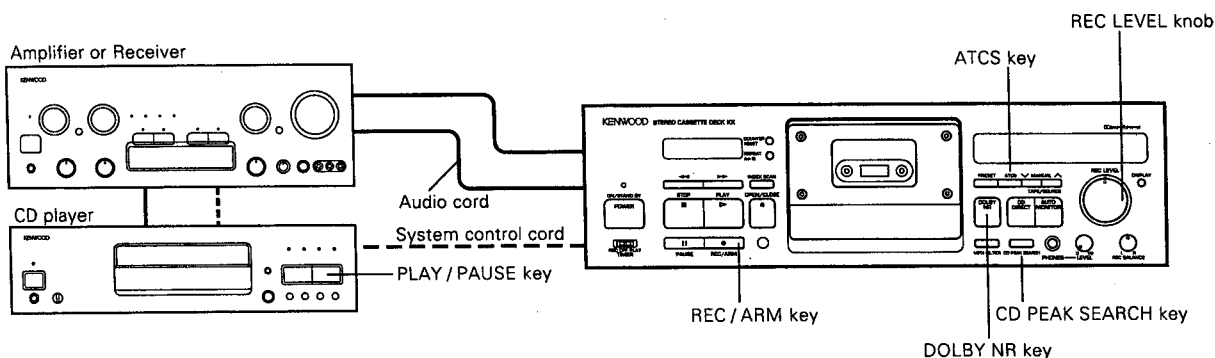
- The CD player starts playback, and the cassette deck starts recording.

To stop in the middle

To pause Press the key of the CD player.
To restart recording Press the key of the CD player.
To stop Press the key of the CD player.

- If the stop key of the cassette deck is pressed, the cassette deck enters the stop mode but the CD player does not.

Connect this unit to a KENWOOD "XS" type CD player as shown below.



■ Edited recording of CD

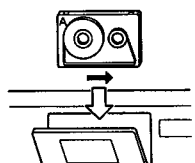
By using the editing function of the CD player, tracks on the CD can be recorded on tape so that none of them is interrupted in the middle at the end of tape.

1 Set the input selector switch of the amplifier for the CD source.

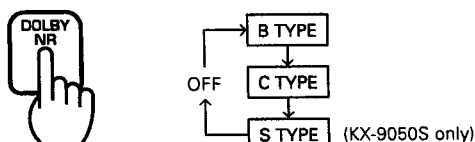
2 Place a CD in the CD player.

3 Make preparations for recording.

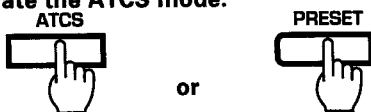
① Insert a tape.



② Select the Dolby NR mode.



③ Activate the ATCS mode.



4 Start editing.

- For the editing method, read the instruction manual of the CD player.

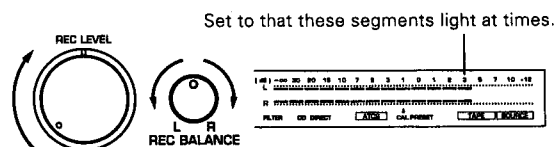
5 Search the peak value on the CD.

- Check if the CD DIRECT mode is OFF.
 - The CD DIRECT indicator should be OFF.
- Press the CD PEAK SEARCH key.

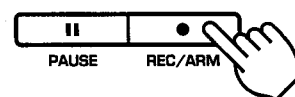


- The cassette deck enters the record-pause mode.
- Sound sampled from the CD is played back.
- If the CD player is not connected to this unit via a synchro cord, the CD peak search function will be canceled in about 30 seconds.

6 Adjust the recording level and recording balance



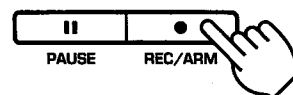
7 Record onto cassette tape side A.



- After side A has been recorded, the cassette deck enters the stop mode and the CD player enters the pause mode.

8 Record onto side B of the tape.

- Reverse the cassette tape.
- Press the key of the cassette deck.



- Press the key of the CD player.

Timer operation

This unit incorporates a built-in timer standby function. By using an audio timer optionally available in the market, wake-up playback and unattended recording of tape can be started at any time of the day.

Preparations for timer playback and recording

Connect the power cords of the components to the timer so that their powers can be turned on via the timer.

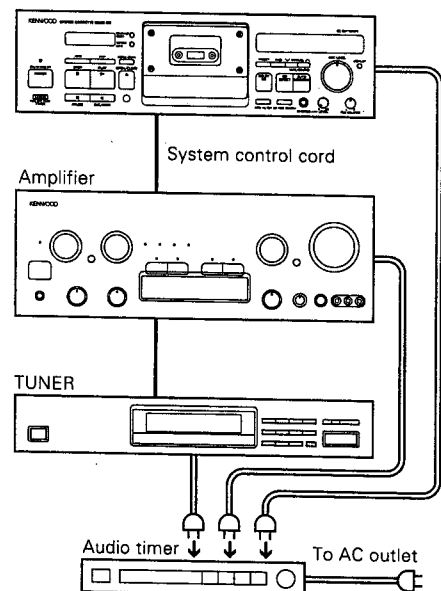
Read carefully the instruction manual of your audio timer.

When operating the unit other than CD player using an audio timer, be sure to remove the disc from the CD player.

Memory backup

This unit incorporates the memory backup function, with which a memory stores the ATCS preset values and the statuses when the power was last turned OFF (such as Dolby NR setup). The backup memory is held for about three days even when the power cord is left unplugged.

When the unit is connected to a KENWOOD amplifier
(via system control cord)

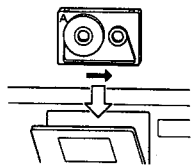


■ Timer playback

1 Set the power switches of the components to ON.

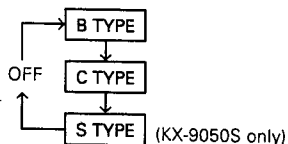
2 Make preparations of the cassette deck.

① Insert a cassette tape.



- The type of tape, that is, Normal, Chrome or Metal, is set automatically.
- Remove the tape slack before insertion.

② Select the Dolby NR mode.



- Set according to the tape to be played.

3 Set the amplifier volume.

- ① Start playback.
- ② Adjust the volume of the amplifier.
- ③ Rewind the tape to the start position.

4 Set the timer so that the tape starts at the desired time of the day.

- Read carefully the instruction manual of your audio timer.

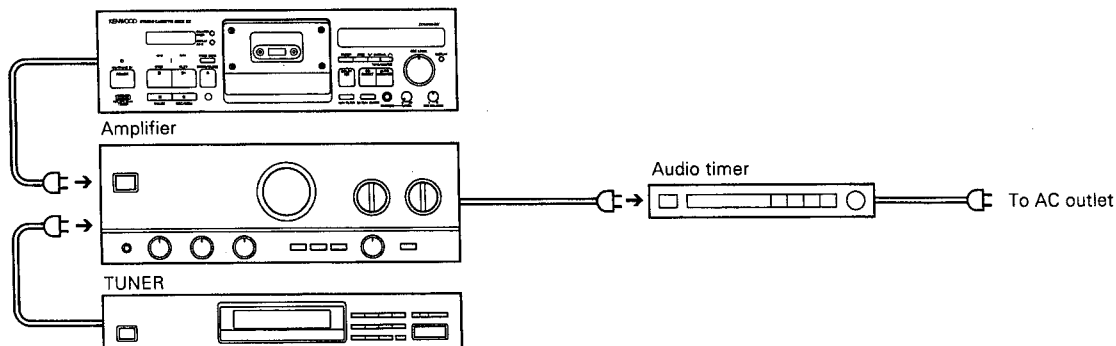
5 Set the TIMER switch to PLAY.



- When the set time comes, tape playback starts automatically.
- Playback stops when the end of tape is reached.

When the unit is connected to a non-KENWOOD amplifier

(in case it is not connected to a KENWOOD amplifier via system control cord)



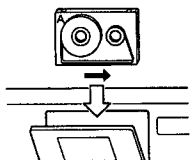
■ Timer recording of tuner broadcast

1 Set the power switches of the components to ON.

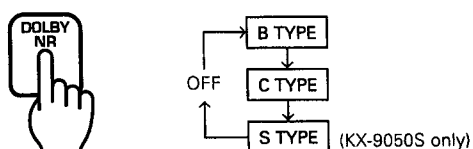
2 Receive the desired radio station with the tuner.

3 Make preparations of the cassette deck.

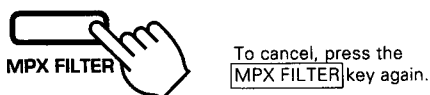
① Insert a tape.



② Select the Dolby NR mode.

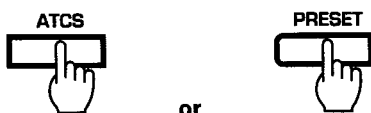


③ Set the MPX FILTER to ON.



- The [MPX FILTER] key is invalid when the CD DIRECT mode is ON. Set the CD DIRECT to OFF (so that the indicator is OFF).

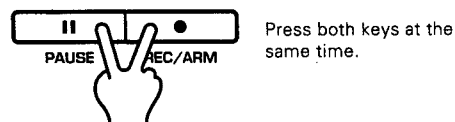
4 Activate the ATCS mode.



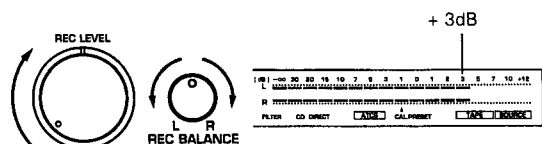
- For the preset operation, refer to page 14.

5 Adjust the recording level.

① Set the record-pause mode.



② Adjust the recording level and recording balance.



- Adjust so that the + 3 dB segments of the peak level meter lights at times.

6 Set the amplifier volume to the minimum position.

7 Set the desired time when the recording is to be started.

- Read the instruction manual of your timer.

8 Set the TIMER switch to REC.



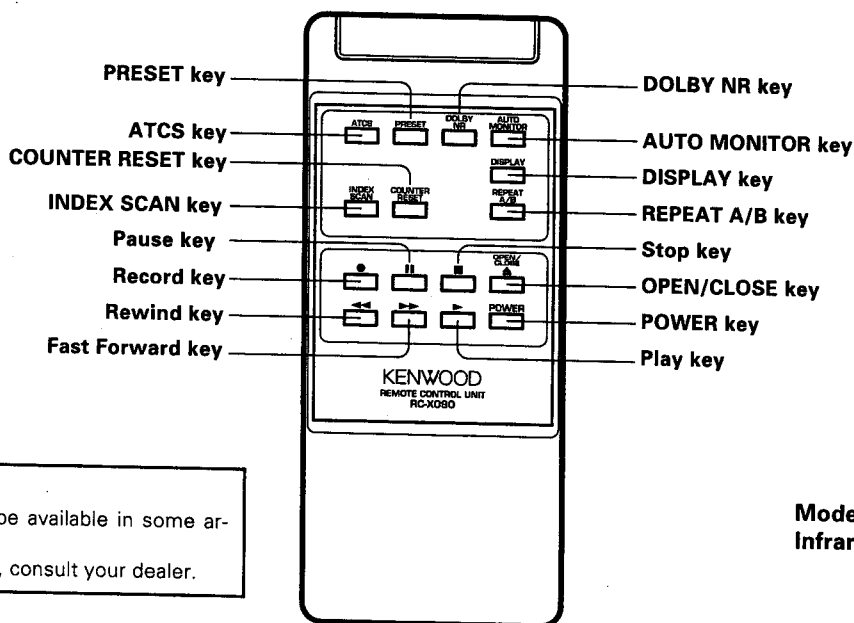
- When the set time comes, the powers of the related components are turned ON and recording starts.
- Recording stops when the end of side to be recorded is reached.

Note:

To ensure that the cassette deck's automatic shut off switch operates before the power is shut off, set the timer so that it operates for a little longer than the playing time of the tape.

Remote control operation (optional)

This unit can be controlled from the optional remote control unit. The functions of the keys on the remote control unit are the same as those of the keys with the same names on the main unit.

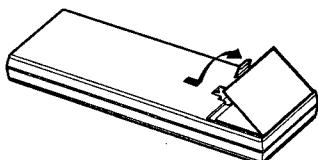


* IMPORTANT

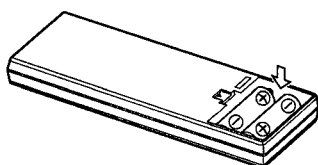
This option may not be available in some areas.
For details on options, consult your dealer.

■ Loading batteries

1 Remove the cover.

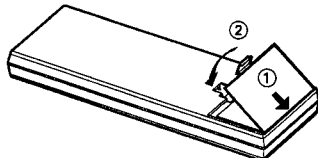


2 Insert batteries.



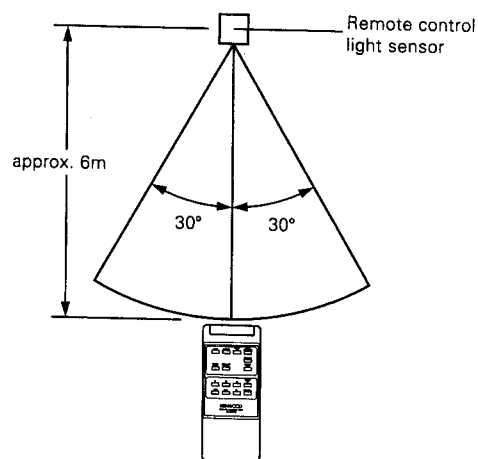
Insert two AA-size (R6 / SUM-3) batteries as indicated by the polarity marking.

3 Close the cover.



■ Operation procedure

Operating range



- When two operation keys on the remote control unit are pressed successively, press each key securely reserving an interval of more than 1 second for each press.

Notes:

- The supplied batteries are intended for use in operation checks. Therefore, their lives may be shorter than ordinary batteries.
- When the remote-controllable distance gets shorter than before, replace both batteries with new ones.
- Malfunction may occur if direct sunlight or the light of a high-frequency lighting fluorescent lamp enters the remote control light sensor. In such a case, change the system installation position to prevent the malfunction.

In case of difficulty

What appears to be a malfunction may not always be serious. If your unit should not perform as expected, consult the table below to see if the problem can be corrected before seeking help from your dealer or service representative.

Symptom	Cause	Remedy
Sounds is not produced when the Play key is pressed.	<ul style="list-style-type: none"> ● The connection cords are connected improperly. ● The head is dirty. ● Tape is irregularly wound and hard to take up. ● A non-recorded tape is being played. 	<ul style="list-style-type: none"> ● Connect the cords properly referring to "System connections". ● Clean the head referring to "Cleaning the head section". ● Replace the tape. ● Play a recorded tape.
The deck does not work when an operation key is pressed.	<ul style="list-style-type: none"> ● The cassette holder is not closed completely. ● The operation key was pressed immediately after closing the cassette holder. ● The operation key was pressed within less than 3 seconds after the power was turned on. ● Tape is not inserted. ● Tape is irregularly wound and hard to take up. ● Tape is fully wound to a reel. 	<ul style="list-style-type: none"> ● Close the cassette holder completely. ● Press the desired operation key in a few seconds after closing the cassette holder. ● Press the desired operation key in more than 3 seconds after turning the power on. ● Insert a tape. ● Replace the tape. ● Reverse the tape cassette.
DPSS malfunctions.	<ul style="list-style-type: none"> ● The tape is not suitable for DPSS operation, for example the spaces between tunes are too short. 	<ul style="list-style-type: none"> ● Read "DPSS operation".
CD PEAK SEARCH does not work.	<ul style="list-style-type: none"> ● A recordable tape is not inserted in Deck. ● A disc is not placed in the CD player. ● The disc is dirty. 	<ul style="list-style-type: none"> ● Insert a recordable tape in Deck and press the [CD PEAK SEARCH] key. ● Place a disc in the CD player and press the [CD PEAK SEARCH] key. ● Clean the disc, place it in the CD player, and press the [CD PEAK SEARCH] key.
Sound is hoarse, or high frequencies are not audible.	<ul style="list-style-type: none"> ● The head is dirty. ● The tape is stretched or wrinkled. 	<ul style="list-style-type: none"> ● Clean the head referring to "Cleaning the head section". ● Replace the tape.
Sound is distorted.	<ul style="list-style-type: none"> ● The recording level was too high. ● A tape recorded with distorted sound is being played. 	<ul style="list-style-type: none"> ● Adjust the recording level referring to "How to record". ● Replace the tape.
Recording is not initiated when the REC / ARM key is pressed.	<ul style="list-style-type: none"> ● The cassette holder is not closed completely. ● The recording level is set to the minimum position. ● The TAPE input selector is selected on the amplifier. ● Tape is wound to one side. 	<ul style="list-style-type: none"> ● Close the cassette holder completely. ● Adjust the recording level referring to "How to record". ● Press the input selector key of the source to be recorded. ● Insert the tape inversely.
The cassette holder opens when the REC / ARM key is pressed.	<ul style="list-style-type: none"> ● The protect tab on the cassette is broken. ● Tape is not inserted in the holder. 	<ul style="list-style-type: none"> ● Use a cassette with unbroken tab, or close the hole made by breaking the tab. ● Insert a tape.
The cassette holder will not open when the OPEN / CLOSE key is pressed.	<ul style="list-style-type: none"> ● The power cord is not connected. ● The tape is being recorded onto. 	<ul style="list-style-type: none"> ● Plug the power cord into a wall outlet. ● Press the [STOP] key to stop recording.
Noise level is high.	<ul style="list-style-type: none"> ● The head is magnetized. ● External noise is induced. ● The recording level was too low. ● A tape recorded with Dolby NR ON is being played with Dolby NR OFF. 	<ul style="list-style-type: none"> ● Demagnetize the head referring to "Cleaning the head section". ● Install the system apart from other electrical appliances and TV set. ● Adjust the recording level referring to "How to record". ● Press the [DOLBY NR] switch to ON.
Sound is vibrating.	<ul style="list-style-type: none"> ● The capstans or pinch rollers are dirty. ● Tape is irregularly wound. 	<ul style="list-style-type: none"> ● Clean the head referring to "Cleaning the head section". ● Wind the tape regularly by fast forwarding, rewinding or playing it fully from one reel to another.
Playback or recording starts at the moment the power is turned ON.	<ul style="list-style-type: none"> ● The [TIMER] switch is set to PLAY or REC. 	<ul style="list-style-type: none"> ● Set the [TIMER] switch to OFF unless in case timer playback or timer recording is required.

Notes:

1. This unit is microprocessor-controlled, so malfunction may occur due to external noise or interference noise. In such a case, unplug the power cord, plug it and turn power on again.
2. Do not use contact cleaners because it could cause a malfunction. Be specially careful against contact cleaners containing oil, for they may deform the plastic components.
3. With some tapes, a squeaky noise is produced when the tape is stopped automatically. This is due to the tape protection function, and not a malfunction.
4. Do not use 120-minute tapes, for the tape is too thin and gets easily tangled.

Specifications

Track System 4-track, 2-channel stereo
Recording System AC bias (Frequency: 210 kHz)
Heads Playback / recording head
(Combination head) 1
Erasing head 1
Motors DC motor × 4
Fast Winding Time ... Approx. 75 seconds (C-60 tape)
Frequency Response:
Normal Tape 20 Hz to 19,000 Hz, ± 3 dB
CrO₂ Tape 20 Hz to 19,000 Hz, ± 3 dB
Metal Tape 20 Hz to 22,000 Hz, ± 3 dB
Signal-to Noise Ratio:
Dolby S NR ON 80 dB (metal tape)
(KX-9050S only)
Dolby C NR ON 75 dB (Metal tape)
Dolby B NR ON 67 dB (Metal tape)
Dolby NR OFF 59 dB (Metal tape)

Harmonic Distortion Less than 0.7 %
(at 1 kHz, 3rd H.D.Metal Tape)
Wow and Flutter 0.024 % (W.R.M.S.)
± 0.055 % (DIN)
Input sensitivity / Impedance:
LINE IN 77.5 mV / 50 kΩ
CD DIRECT 460 mV / 10 kΩ
Output Level / Impedance:
LINE OUT 490 mV / 1 kΩ
Headphones 2.3 mW / 8 Ω

[GENERAL]

Power Consumption

KX-9050S 35 W
KX-9050 30 W

Dimensions W: 440 mm (17-5 / 16")
H: 138 mm (5-7 / 16")
D: 328 mm (12-15 / 16")

Weight (Net)

KX-9050S 7.5 kg (16.5 lb)
KX-9050 7.3 kg (16.1 lb)

For CANADA

DOC REGULATION

"This digital apparatus does not exceed the CLASS B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications."

Strömbrytarens POWER beredskapsläge

Indikatorn STAND BY tänds efter nätkabelns anslutning till ett vägguttag, oavsett strömbrytarens POWER till/frånslag. Detta anger att en liten mängd ström leds till komponenten som stöd för minnesinnehållet.

Detta läge kallas för beredskapsläget. Strömbrytaren på fjärrkontrollen kan användas för att slå på och av strömmen så länge indikatorn STAND BY lyser.

Virtanäppäimen (POWER) valmiustila (STAND BY)

Kun laitteen verkkojohto on liitetty pistorasiaan, valmiustilan merkkivalo syttyy riippumatta virtanäppäimen (POWER) asennosta (ON/OFF).

Merkkivalo osoittaa, että laitteessa on hieman virtaa muistin sisältöjen ylläpitoa varten. Tätä tilaa kutsutaan valmiustilaksi. Kun valmiustilan merkkivalo (STAND BY) palaa, laitteen virta voidaan kytkeä ja katkaista kaukosäätimellä.

Afbrydertastens (POWER) STAND BY funktion

Når apparatets strømledning er tilsluttet en stikkontakt, lyser STAND BY indikatoren, uanset om der er tændt ved afbryderen på apparatet eller ej. Det angiver, at apparatet bliver forsynet med en ganske lille mængde strøm til opret-holdelse af hukommelsens indhold.

Denne funktion kaldes STAND BY. Når STAND BY indikatoren er tændt, kan strømmen til apparatet slås til og fra med fjernstyrringsenheden.

PÅ/AV-knappens Stand-by funksjon

Når strømledningen til dette anlegget er satt i en vekselstrømskontakt, vil STAND-BY indikatorlampen lyse enten PÅ/AV-knappen er på- eller avslått. Dette betyr at en viss mengde strøm tilføres anlegget slik at innholdet i minnet ikke går tapt. Denne funksjonen kalles Stand-by. Når indikatorlampen for STAND-BY er tent, kan strømmen slås PÅ / AV fra fjernkontrollen.